

Join us on the second Thursday of every month for a series of "brown bag" seminars sponsored by the National Renewable Energy Laboratory and the U.S. Department of Energy. Each seminar is held at NREL's Washington offices with a video-conference link to Golden, Colorado. Topics focus on new and innovative renewable energy and energy analysis strategies, models, and technologies.



Energy Analysis Seminar Series

A "brown bag" analytical seminar series

Life Cycle Assessment

Margaret K. Mann

National Renewable Energy Laboratory

November 8, 2001

12:00 – 1:00 p.m.

NREL uses life cycle assessment (LCA) to provide direction, focus, and support to the development and commercialization of various research projects being supported by the Department of Energy. This analytic method identifies and evaluates the environmental impacts of energy technologies. When such an assessment is performed in conjunction with a technoeconomic feasibility study, the total economic and environmental picture can be quantified. In LCA, material and energy balances are used to quantify the emissions, resource use, and energy consumption of all processes required to make the process of interest operate. Process blocks that are included in the boundary of the analysis include raw material extraction, transportation, processing, and final disposal of products and by-products. The results of the inventory are used to evaluate the net environmental impacts so that efforts can be focused on mitigating negative effects. The seminar will include a description of LCA methodologies and results from one of the studies completed for DOE's Biomass Power Program.

Margaret Mann is a Senior Chemical Process Engineer at the National Renewable Energy Laboratory. She has over eight years of experience in process modeling, including economic feasibility studies, ASPEN simulations, and life cycle assessment.

Future seminar topics

December 13, 2001:

"The Value of DER Options for Congested Transmission and Distribution Systems"

Susan McCusker and Jack Siegel, Energy Resources International



370 L' Enfant Promenade is located adjacent to the Forrestal building at 901 D Street SW in downtown Washington (Aerospace Building). Please contact Wanda Addison at NREL at wanda_addison@nrel.gov

For more information on NREL, please visit the NREL Web site at <http://www.nrel.gov/>

